

What is claimed is:

1. A drive apparatus for a plasma display panel comprising a charge recovery circuit that re-uses a recovered electrical charge, said drive apparatus comprising:

5 a brightness detection means for detecting a brightness so as to obtain screen brightness information; and

a charge recovery timing control means for controlling a charge recovery period from a time at which a charge recovery operation of said charge recovery circuit starts to a time
10 of fixing to a sustaining potential or a ground potential,

wherein said charge recovery timing control means controls said charge recovery period of said charge recovery circuit in response to said brightness information obtained by said brightness detection means.

15 2. A drive apparatus for a plasma display panel according to claim 1, wherein said brightness detection means comprising:

an image signal accumulator for accumulating an brightness of each pixel of said plasma display panel for each
20 frame or for each field of an image signal; and

an accumulated value comparator for determining whether an accumulated value detected by said image signal accumulator is larger or smaller than a prescribed value.

3. A drive apparatus for a plasma display panel
25 according to claim 2, wherein said image signal accumulator accumulates an brightness of all pixels in an effective display area of said plasma display panel.

4. A plasma display panel drive apparatus according to claim 2, wherein said image signal accumulator accumulates

only a brightness of pre-established pixels within an effective display area of said plasma display panel.

5 5. A drive apparatus for a plasma display panel according to claim 2, wherein said charge recovery timing control means controls so that, when said accumulated value obtained by said image signal accumulator is lower than a prescribed value said charge recovery period is made relatively short, and further so that, when said accumulated value obtained by said image signal accumulator is higher than
10 said prescribed value said charge recovery period is made relatively long.

 6. A drive apparatus for a plasma display panel according to claim 1, wherein said charge recovery timing control means controls to change said charge recovery period
15 for only a sub-field that has a relatively large brightness weight, and to leave said charge recovery period for a sub-field having a relatively small brightness weight unchanged.

 7. A drive apparatus for a plasma display panel
20 according to claim 1, further comprising a pixel counting means for counting a number of pixels of a brightness exceeding a pre-established reference brightness, wherein in a case in which a value counted by said pixel counting means is below a pre-established value, said charge recovery timing
25 control means control so as to make said charge recovery period relatively long.

 8. A drive apparatus for a plasma display panel according to claim 2, wherein said image signal accumulator accumulates an brightness of each pixel and then determines

the average brightness.

9. A drive apparatus for a plasma display panel according to claim 1, wherein said brightness detection means comprises a power consumption detection means for measuring
5 a power consumption of said plasma display panel.

10. A method for driving a plasma display panel comprising a charge recovery circuit for re-using a recovered electrical charge, said method comprising:

a first step of accumulating a brightness of each pixel
10 of said plasma display panel for each frame or for each field of an image signal;

a second step of comparing said value accumulated in said first step so as to determine whether said value is larger or smaller than a prescribed value;

15 a third step of changing a charge recovery period from a time at which a charge recovery operation of said charge recovery circuit starts to a time of fixing to a sustaining potential or a ground potential, in response to said comparison results obtained in said second step.